

CHAPTER 6

Education and Public Involvement

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Background and Context of Chapter

This chapter contains a broad set of education, outreach, and involvement recommendations designed to:

- Ensure that in the near-term, the community is aware of salmon conservation needs and is ready to take personal action to contribute to salmon habitat conservation.
- Provide a menu of options to local governments, nonprofit organizations, citizen groups, and area businesses as they proceed with salmon conservation efforts in the watershed.
- Educate and mobilize the community on behalf of salmon conservation on a regional and local scale.
- Make a clear connection between the factors of decline affecting salmon habitat and the actions and choices that people make in their daily lives.

The recommendations are intended to supplement existing efforts and extend programs that benefit salmon conservation to larger geographic areas and to expand upon and enhance the work of the multi-jurisdictional WRIA 8 Public Outreach Committee. (See Chapter 9, Acknowledgements, for a committee roster.) This committee is working on a regional scale to involve citizens in salmon conservation planning efforts.

The WRIA 8 Public Outreach Committee developed the recommendations in this chapter based on the factors of decline for salmon habitat, guiding principles, and additional guidance from the near-term strategy (see Chapter 2). Two sets were developed concurrently and then combined in this chapter: (1) recommendations that address identified factors of decline in the watershed and (2) recommendations that have watershed-wide impacts. They are designed to be undertaken within the next 5 years to help ensure that no further harm is done to salmon habitat and to lay the groundwork for the long-term salmon conservation plan.

The Public's Role in Salmon Conservation

Salmon conservation and recovery will only succeed through the cumulative actions, both great and small, of all residents in the watershed. While governments are an important source of action through their efforts to conduct research, adopt regulations, and protect and restore habitat, salmon will not be recovered in the watershed through the actions of government alone. Because every individual in the watershed can help salmon to either recover or continue to

decline, a successful conservation effort must involve commitment and conscientious action by all individuals.

There are numerous ways that individuals and businesses can contribute to salmon conservation efforts. Here are three very effective ways:

1. Individuals can make adjustments to their daily living habits, such as conserving water, choosing less toxic cleaning products, and adopting salmon-friendly gardening practices.
2. The actions of private owners of shoreline property directly affect a large area of salmon habitat. The decisions that individual and business landowners make about landscaping their properties, managing stormwater, and treating waste all have potential impacts on factors of salmon habitat decline in the watershed.
3. Individuals and businesses can contribute their energy and time to salmon habitat improvement projects. Removing invasive species in shoreline areas, replanting native trees and plants, and gathering monitoring data to track key indicators of ecosystem health are some of the activities that are well suited to volunteers.

The cumulative benefit of individual commitments clearly points to the necessity for well-designed, well-organized public education and outreach throughout the watershed. Such efforts can help foster more salmon awareness as well as a citizenry knowledgeable about what it can do personally to help restore salmon populations.

Building commitment to salmon conservation among citizens in the Lake Washington/Cedar/Sammamish Watershed will be a long-term endeavor. Public outreach and education is a process of creating awareness and understanding and encouraging responsibility and action. It took years of persistent outreach efforts to get citizens in this region to recycle, and it will take years to build a salmon conservation ethic that results in choices and behaviors that benefit salmon. The recommendations in this chapter can help launch such an effort now.

Organization of Recommendations

Unlike recommendations and guidance found elsewhere in the Action Agenda, which are connected more directly to factors of decline for salmon habitat, these recommendations for public involvement are structured according to anticipated outcomes. Each outcome is based on one or more of the following principles from the near-term strategy in Chapter 2:

- Do no harm.
- Conserve areas of existing use.
- Conserve best remaining habitat.

The seven anticipated outcomes are:

1. Citizen impacts on salmon habitat are reduced throughout the watershed; the public learns ways to contribute to salmon conservation.
2. Shoreline landowners throughout the watershed are educated about their particular impacts on salmon habitat; an increased number of shoreline landowners participates in salmon conservation efforts.
3. Youth throughout the watershed learn about humans' role in salmon habitat degradation; youth participation in on-the-ground conservation efforts increases.
4. Community participation in salmon conservation activities increases.
5. Livestock management impacts on salmon habitat and water quality are reduced.
6. The impacts of new development on salmon are reduced.
7. The impacts of WRIA 8 businesses on salmon are reduced.

Public outreach and involvement are intended to lay the groundwork for long-term conservation and may have a less immediate and obvious benefit to salmon habitat than recommendations found elsewhere in this document. Whereas projects and regulatory guidance offer the satisfaction of addressing and rectifying specific factors of decline, public actions are rewarded with broad, far-reaching outcomes. Therefore, recommendations are organized according to expected outcomes, not by factors of decline.

Guidance for Selecting Recommendations

Because of limited resources, it is necessary to make choices in salmon conservation. Local jurisdictions, nonprofit organizations, and partnerships of interested stakeholders should consider undertaking outreach and education programs that complement and cohere with other programs. Entities choosing a public education or outreach recommendation from this chapter – or that may be developing one of their own – should find the following guidelines helpful:

- Study any available survey data on community and area residents to determine their level of knowledge as well as their current behaviors, particularly those that affect salmon habitat.
- Make use of any technical assessment that will help determine the most serious factors of decline in a particular geographic area. The multi-jurisdictional WRIA 8 Technical Committee may be of assistance.

- If shoreline property owners have a stake in the land area of interest, consider focusing on recommendations that target that particular audience. While the actions of all watershed residents have impacts on salmon runs, those of shoreline property owners have the most direct and immediate impacts.
- Evaluate existing funds and resources and consider those recommendations that best leverage these assets.
- Determine if recommendations will help build a foundation for conducting long-term public outreach.

Incentive Programs to Reduce Impacts on Salmon Habitat

Because so much of the watershed's land area is in private holdings or affected by citizens' activities, it makes sense to encourage citizens, landowners, and developers to adopt land- and resource-management measures that benefit salmon and work in concert with the Action Agenda. Many of these actions could be implemented immediately; the question is, what are appropriate incentives for fostering such conservation measures? The following programs are recommended to motivate citizens, landowners, and developers to make their activities and properties more salmon friendly.

Incentives for Citizens

- Extend availability of water conservation incentive programs (such as rebates for efficient toilets and clothes washers or free indoor conservation kits) beyond public utility boundaries as a means of decreasing household water consumption throughout the Lake Washington/Cedar/Sammamish Watershed.

Target audience: General public and high-end water users

- Target high-end water users for individual landscape/household assessments, water conservation recommendations, and money savings programs.

Target audience: High-end water users

Models to consider: Smart and Healthy Landscape (Seattle Public Utilities and others) and Water Cents (cities of Redmond and Woodinville)

- Increase the number of development sites where native plant salvages occur. Integrate these salvage opportunities into naturescaping classes; class participants can take home native plants for immediate use both within and surrounding sensitive areas.

Target audience: General public, especially shoreline property owners
Models to consider: King County Native Plant Salvage Program

Incentives for Landowners

- Adapt existing landowner financial incentive programs to appeal to small property owners whose parcels include high-quality salmon habitat or have high restoration potential. Such incentives would encourage small property owners to forgo development.

Target audience: Shoreline property owners
Models to consider: Public Benefits Rating System (King County)

- Promote existing programs that create financial incentives to conserve salmon habitat, such as King County's Public Benefit Rating System. Increase technical resources to assist landowners in securing these incentives.

Target audience: Shoreline property owners
Models to consider: Public Benefits Rating System (King County)

Incentives for Developers

- Create and implement financial incentives to encourage developers to participate in green building programs, such as the Association of Home Builders' Green Program (Built Green) and Evergreen Builders Guide (Port Blakely Communities and City of Issaquah).

Target audience: Construction industry

Public Outreach, Education, and Involvement Recommendations

The following recommendations are numbered for reference, not priority. Actions and recommendations contained in this chapter are targeted for the general public unless otherwise noted.

Outcome 1: Citizen impacts on salmon habitat are reduced throughout the watershed; the public learns ways to contribute to salmon conservation.

A. Development/distribution/promotion of educational materials

1. Reprint, update, and promote existing salmon education materials. (Examples include *Chinook Book*, *The Watershed Waltz* and *The Sammamish Swing*, *Streamside Savvy*, Seattle Public Utilities' Salmon Friendly Gardens materials.) Distribute as appropriate.

2. Develop an organized resource list containing brief descriptions of existing salmon education materials targeting both youth and adults (including teachers). This resource list should include curricula, brochures, videos, kits, and other education materials. Distribute to jurisdictions, non-government organizations, and educators.

Target audience: Educators (including jurisdictions and non-government organizations)

3. Create displays for salmon-friendly gardening and landscaping practices and exhibit at events such as the Home Show and the Northwest Flower and Garden Show.
4. In coordination with the appropriate group or agency, prepare summaries of the latest scientific and technical findings identified by the WRIA 8 Technical Committee as critical issues to salmon. Distribute to educators (non-government organizations, trainers, community involvement staff, teachers, etc.) through fact sheets, web pages, etc. An example of information to share is the latest findings on how toxics in aquatic areas affect the ability of fish to find their natal streams.
5. Make existing educational materials available in public venues, such as malls, libraries, and town halls. These materials should also be distributed at public events, including large regional events such as Issaquah Salmon Days as well as smaller events that draw audiences from a more limited geographic area (for example, town festivals, salmon habitat restoration events).
6. Create local informational TV spots that could run on Salmon Information Television (SITV) and other local cable channels. These broadcasts would educate citizens about factors of salmon habitat decline that they could address through landscape design and management, as well as personal practices. The series could feature, for example, most wanted lists of non-native species, impacts of docks on salmon and alternative dock practices, impacts of hardened shores on salmon and soft engineering alternatives, and the role of salmon habitat restoration areas, including guidelines for people visiting the areas.
7. At habitat restoration or refuge area access points, place signs and distribute brochures that explain the role of these sites in salmon recovery and ways visitors can limit their impact.

Models to consider: Storm Drain Stenciling Project (King County)

8. Provide leaflets to fish stores to distribute to their customers. These leaflets would address the negative impacts of releasing non-native fish and aquatic plants into local natural areas.

Target audience: Pet fish owners

9. Publicize a most wanted list of non-native plants and animals in the Lake Washington/Cedar/Sammamish Watershed. Contact the King County Noxious Weed Control Board for a list of plants.
10. Design and implement educational programs that encourage the use of compost in urban and rural landscapes.

B. Media outreach/community recognition

1. Hold media briefings on significant events in the salmon recovery process in WRIA 8 as they occur.

Target audience: Media and general public

2. Develop a Lake Washington/Cedar/Sammamish Watershed award that recognizes the outstanding achievements of individuals, organizations, businesses, and government agencies on behalf of salmon. Have an awards ceremony to which the media are invited.
3. Develop an outreach/marketing campaign in coordination with other groups involved in regional salmon recovery efforts (such the Puget Sound Shared Salmon Strategy Forum and other water resource inventory area groups) to create and foster salmon consciousness messages through the use of billboards, bumper stickers, public service announcements, articles, and op-eds in the media.

Models to consider: WRIA 8 Public Outreach Committee key salmon recovery messages.

C. Presentations

1. Identify specific groups to involve in salmon recovery efforts (for example, sportfishing groups, churches, service organizations). Give presentations and distribute educational materials to these groups. Presentations could focus on factors of decline for salmon habitat in the Lake Washington/ Cedar/Sammamish Watershed and on near-term actions. WRIA 8 Public Outreach Committee plans to create a presentation that will be available for loan in 2003.

Target audience: Specified groups

Models to consider: King County's Endangered Species Act Speakers Bureau

D. Workshops/events/tours/involvement

1. Hold community education sessions or open houses (Salmon Evenings or annual events) to cover specific topics designed to raise watershed awareness and to educate citizens about the positive and negative effects individual behaviors can have on salmon recovery. Topics could include:

- The natural and historical functions of WRIA 8
- Water connections
- Salmon-limiting factors, such as toxics and household chemicals and non-native species of concern
- The role of restoration areas in salmon recovery.

Models to consider: Snohomish County Confluences Workshop, proposed watershed summit by WRIA 8 Public Outreach Committee

2. Identify and organize tours of private and public gardens that showcase ways residents can have a positive impact on salmon recovery (for example, use of rainwater collection systems, minimally toxic landscapes, use of pervious surfaces).

Target audience: Homeowners

3. Start a sensitive-area ranger program that places a trained volunteer or staff member at restoration sites. This person would educate visitors about how to lessen their impact on sensitive areas and would also document and cite continuing harmful practices.

Models to consider: King County Beach Naturalist Program, Cedar River Naturalist Program (multiple organizations; contact Community Stewardship Program at King County Department of Natural Resources and Parks for more information)

4. Educate residents and fishers about the effects of non-native sport fish on salmon.

Target audience: Fishers

5. Stencil stormdrains and track the locations and dates in a Lake Washington/ Cedar/Sammamish Watershed database.

Models to consider: Several isolated efforts throughout the Lake Washington/Cedar/Sammamish Watershed. Contact King County Storm Drain Stenciling Program.

Outcome 2: Shoreline landowners throughout the watershed are educated about their particular impacts on salmon habitat; an increased number of shoreline landowners participates in salmon conservation efforts.

A. Development/distribution/promotion of educational materials

1. Distribute information to shoreline property owners on household and landscape best management practices, as well as information about community involvement opportunities. The WRIA 8 Public Outreach Committee plans to develop a WRIA 8-wide shoreline property owner list.

Target audience: Shoreline property owners

Models to consider: *Shoreline Property Guidebook*, published by Puget Sound Water Quality Action Team

2. Develop a resource guide that lists the ecological and design experts who focus on salmon-friendly landscaping and shoreline treatments.

Target audience: Shoreline property owners

3. Assess the availability of public information materials on the subject of repairing and/or replacing bulkheads. If such materials are available through a public agency, find out if those materials can be modified to emphasize the value of bioengineering for habitat. If no such public information materials exist, create a bulkhead repair/replacement brochure that could be distributed.

Target audience: Bulkhead owners

B. Assessment

1. Assess non-native species along shorelines and provide resources and/or assistance to private landowners to eradicate the infestations on their property. Work with both King County and Snohomish County noxious weed control boards on survey, education, and enforcement efforts.

Target audience: Shoreline property owners with non-native weeds

Models to consider: King County and Snohomish County noxious weed control boards

C. Program development

1. Develop and implement a septic system education and incentive program in lakeside communities.

Target audience: Septic system owners

Models to consider: City of Issaquah Septic Education Program (2001)

D. Demonstration project

1. Locate prominent property owner (or public agency) willing to remove dock and/or bulkhead and replace it with a more ecologically friendly design. Publicize this effort through various means. The demonstration dock/bulkhead should contain elements that can be done by average shoreline property owners (within expected financial means and on the scale of an average residence). Provide information on costs and advantages of alternative dock/bulkhead efforts.

Target audience: Shoreline property owners

E. Technical assistance

1. Provide training, financial incentives, and technical support to existing companies to develop a sound strategy for encouraging the use of salmon-friendly dock and/or bulkhead construction materials and designs, as well as salmon-friendly maintenance practices, by their clients. Provide information that describes the benefits of alternative dock/bulkhead practices.

Target audience: Dock and bulkhead construction companies

Outcome 3: Youth throughout the watershed learn about humans' role in salmon habitat degradation; youth participation in on-the-ground conservation efforts increases.

A. Development/distribution/promotion of educational materials

1. Develop an organized resource list containing brief descriptions of existing salmon education materials targeting both youth and adults (including teachers). This resource list should include curricula, brochures, videos, kits, and other education materials. Distribute to jurisdictions, non-government organizations, and educators.

Target audience: Educators (including jurisdictions and non-government organizations)

2. Draw on existing salmon education materials and work with science curriculum coordinators throughout schools in the watershed to develop methods for implementing appropriate curricula and/or incorporating new projects/programs into existing curricula.

Target audience: Youth

3. Adapt the merit badge system of scout troops to reflect different levels of salmon conservation and extend beyond scout troops to schools, clubs, etc.

Target audience: Youth

Models to consider: Girl and Boy Scout Troop World Conservation Badges

4. Identify and support existing service learning programs aimed at integrating high school class education with needed stewardship activities (monitoring, restoration, education) through tours, organized programs, etc. Expand existing programs into new schools.

Target audience: Youth

Models to consider: Water Tenders Festival (Gwenn Maxfield), North Shore Utility Tour, Mercer Slough Interns Program

5. Sponsor or support a program that offers students outdoor salmon- or watershed-related educational experiences at a site near their homes or schools.

Target audience: Youth

Models to consider: Discovery Park Environmental Center, Carkeek Park Environmental Center, Mercer Slough Environmental Center, Puget Sound Environmental Learning Center

Outcome 4: Community participation in salmon conservation activities increases.

A. New programs/increased involvement in existing programs

1. Citizens have a wealth of skills and experience to contribute to salmon conservation efforts, including data gathering. Create and implement opportunities for citizens to monitor lakes, streams, restoration sites, the nearshore, and wetlands. Such efforts would fill existing data needs while increasing environmental literacy and fostering community ownership of natural resources.

Models to consider: Spartina Watch (Puget Soundkeepers Alliance), King County and Washington State Lakes Monitoring Program, Rapid

Shoreline Inventory (People for Puget Sound), Bellevue and Issaquah Stream Teams, Sammamish Restoration Stewardship Program

2. Expand the King County or Washington State Lakes Monitoring Program to include other high-priority lakes.
3. On one day in August each year, involve families and groups in widespread temperature monitoring to assess water temperatures in many local streams. This effort is currently organized by the Center for Streamside Studies, University of Washington.

Models to consider: Center for Streamside Studies' existing temperature study

B. Promotion and expansion of existing programs

1. Extend shoreline monitoring programs, such as the Rapid Shoreline Inventory (People for Puget Sound) and the Beach Naturalist Program (King and Island counties), along WRIA 8 Puget Sound shorelines.
2. Expand the reach of King County's and Snohomish County's Salmon Watcher programs to heighten knowledge of salmon distribution.
3. Promote existing environmental leadership courses and expand the number of course offerings and locations. Adapt existing programs to create a steward program that is focused on salmon recovery issues and activities.

Models to consider: Washington Native Plant Society's Native Plant Stewardship Program, Washington State University/King County Land/Water Steward, and Snohomish County watershed tours

C. Education tools

1. Identify existing salmon-related classes and volunteer opportunities (for example, naturescaping classes, docent programs) throughout the Lake Washington/Cedar/Sammamish Watershed. Promote these opportunities through websites such as the Salmon Information Center, paper calendars, and other means.

D. Assessment

1. Expand assessment of fish passage barriers in areas containing salmon habitat, and involve community members in the effort.

Models to consider: Adopt-a-Stream program and Urban Creeks Legacy Program (City of Seattle)

2. Publicize statistics about the percentage of the shoreline that is armored and the percentage that is protected from erosion by more natural methods. Track the changes in these statistics over time, using, for example, a WRIA-scale Geographic Information Systems database.

E. Involvement

1. Train and deploy a contingent of community volunteers to mechanically remove invasive aquatic species such as purple loosestrife, yellow iris, and milfoil.

Outcome 5: Livestock management impacts on salmon habitat and water quality are reduced.

A. Technical assistance

1. Provide classes, tours, and assistance in implementing livestock operation best management practices.

Target audience: Livestock owners

Models to consider: Horses for Clean Water and the King Conservation District Programs

Outcome 6: The impacts of new development on salmon are reduced.

A. Outreach campaign

1. In order to show developers that a market exists, create a campaign that tracks the demand among community residents for purchasing green homes and remodeling with green building strategies. For example, develop a web-based pledge to buy a green home. The Green Car program of the Union of Concerned Scientists did something similar to promote environmentally friendly cars and could be used as a reference.

Outcome 7: The impacts of WRIA 8 businesses on salmon are reduced.

A. Assessment

1. Identify businesses or industries in the Lake Washington/Cedar/Sammamish Watershed that have significant stormwater impacts. Organize a prioritized watershed-wide technical assistance program to improve stormwater management practices. Provide training to local

jurisdictions and non-government organizations on how to run a
Businesses for Clean Water program.

Target audience: Businesses

Models to consider: Businesses for Clean Water